Wyckoff Eagle Harbor Superfund Site
EPA / Natural Resource Trustee Update
4/2/15
DRAFT Meeting Summary

MEETING ATTENDEES

Helen Bottcher, EPA	Randy Carman, WA Department of Fish & Wildlife (WDFW) -- by phone
Rich Brooks, Suquamish Tribe	Shayne Cothern, WA Department of Natural Resources (DNR) -- by phone
John Kern, National Oceanic & Atmospheric Administration (NOAA)	
Donna Podger, WA Department of Ecology	

This meeting summary was prepared by Helen Bottcher and reviewed by all attendees. It is not a full record of the discussion, but a summary of key discussion points and action items.

Helen Bottcher provided an update on Superfund site cleanup planning and several related smaller projects to the Natural Resource Trustees (NRTs). The presentation "Wyckoff update April 2015" will be attached to this summary.

Trustee Eelgrass Restoration Project

Before Helen arrived, the NRTs discussed the results of the eelgrass planting in the southern depression (south of the former Milwaukie Dock). The results were somewhat disappointing, with survival as low as 28% in some tracts. Based on these results, the NRTs have decided to wait a year before transplanting eelgrass to the newly filled northern depression. This will allow the new sediment to settle and stabilize.

SPME sampling results

Porewater in the beaches was sampled using SPME samplers in late 2013. Helen will send a copy of the porewater data sampling report to the NRTs.

Replacement "No Anchor" Buoys

Helen described a project scheduled for this summer to install two new "No Anchor" buoys on the sediment cap offshore of West Beach. New buoys are needed because the old ones have been lost and boaters have been anchoring, which could damage the cap. EPA proposes to use concrete block anchors (similar in size to "ecology blocks") rather than a helical screw type anchor. EPA is recommending concrete blocks because they won't penetrate the cap and create a potential preferential pathway for NAPL migration. Also, installing concrete blocks will not require hazardous waste operations diving.

Randy and Shayne both said that they almost always recommend helical anchors but in this case, agree that concrete blocks are appropriate. The other NRTs concurred.

Repair of the Sediment Cap in front of the Ferry Dock

The sediment cap in front of the ferry dock has been eroded, presumably by prop wash from the ferries. The concentration of PAHs in surface sediment samples from this area exceeded the ROD cleanup criteria during the last round of sediment sampling. This finding prompted EPA to recommend repairing this portion of the cap in the last 5 Year Review. On behalf of EPA, the U.S. Army Corps of Engineers is developing a 30% design for the "patch." The area of the patch is approximately 6 acres. The design will employ a two-layer cap of clean imported sediment with a cobble-sized armor layer where needed to prevent future erosion.

The NRTs noted that mitigation may be required if the patch changes the bottom substrate. Helen pointed out that in front of the ferry dock, the bottom substrate is already a cobble / lag deposit. The NRTs asked how much of the 6 acres would be armored with cobble. Helen did not know and said that detail would be in the forthcoming 30% design document. Helen agreed to share a copy of the 30% design for review and comment, along with a list of the relevant and appropriate laws that will require consultation or coordination (e.g., ESA Section 7, CWA sections 401 and 404). The trustees who want to review the draft design are:

- Rich Brooks, Suquamish Tribe
- John Kern, NOAA
- Chris Waldbillig, DNR Habitat Biologist (there may be a new person in this role, but Helen will initially contact Chris)
- Erika Shaffer, DNR (Shayne Cothern provide Erika's contact information following the meeting)

EPA preferred remedy for the Upland (OU2 and OU4) portion of the site

Helen described EPA's preferred remedy for the upland portion of the site, which includes stabilization / solidification of the majority of NAPL contaminated soil in the upland, recovery of NAPL from other portions of the site, enhanced aerobic degradation (EAB), and a site-wide cap. The NRTs expressed concern about the plan to replace the perimeter wall outside the existing wall (on the beach), but agreed that EPA was in a difficult position because of all the debris buried on the inside of the wall.

The NRTs asked when the wall construction would happen. Helen did not have a date, and said that the schedule was dependent on getting through a complex design process and securing remedial action funding. The trustees were less concerned when they learned that construction was unlikely before 2021 – this will allow sufficient time for the trustees' planned eelgrass restoration project in the northern depression to become well established prior to EPA's perimeter wall construction project.

The discussion of trustee concerns is summarized in the table below:

Remedy Element	Trustee Concerns	Potential Ways to Address
Discharge of stormwater from the surface of the proposed site-wide cap through a new 20" outfall pipe. Proposed alignment is just south of and parallel to the existing treatment plant outfall.	Impacts to eelgrass beds and/or the newly designated shellfish growing area during construction. After construction, concerns for potential impacts from erosion, fresh water, armoring around the outfall, and stormwater quality (including	Check outfall location relative to eelgrass beds – Helen thinks outfall is beyond/deeper than outer edge of eelgrass. Modeling potential for erosion at point of discharge; use of diffuser

	fertilizer/nitrogen, fecal coliform from dog waste, etc.)	Need for any armoring would be developed in the design – don't yet know whether this is an issue Work with Dept. of Health to understand discharge conditions that would be of concern to shellfish growing areas Move outfall to west side of site or treat water prior to discharge to address concerns over stormwater impacts
Discharge of groundwater from the upper aquifer to Eagle Harbor – anticipated discharge rate of ~11 gpm	Potential impacts on eelgrass beds: erosion, discharge of dissolved contaminants at levels of concern for fish spawning or other habitat functions	Ensure concentrations are below level of concern prior to discharge Modeling to address erosion potential; design outfall to minimize potential for erosion
Construction of new perimeter wall on beach outside of existing wall	Permanent loss of beach habitat taken up by the new wall (~0.2 acres), AND potential impacts on the eelgrass beds caused by wave energy reflected off the wall – trustees think current wall may be impacting the upper edges of the eelgrass	Modeling to help predict any impacts from moving the wall (Helen is skeptical that model grid is fine enough to show any difference from a three foot change in the wall location, but EPA will look into this) Mitigation for permanent loss of beach habitat Mitigation for some assumed level of impact to the eelgrass beds, post construction monitoring
Construction of a temporary or permanent dock to bring equipment and supplies to the site during construction. Trustees noted that the west beach was built as mitigation, so impacts there would be particularly unwelcome.	Loss of habitat under the dock Dredging on either side of the dock Increased tug, barge, and boat traffic over the eelgrass beds and intertidal beach habitat.	Trustees would prefer no dock; instead, EPA should use overland transport of equipment and materials. Helen said that the current plan is for no dock. The potential for a new dock will be explored in design. Helpful for EPA to understand this concern.

OU1 Remedy for the North Shoal and East Beach areas

Helen provided an update of the remedial planning effort for the offshore portion of the site, including a map of the areas that have not been actively remediated, the location of NAPL in the beach sediments, and EPA's preferred remedy, which is "thin inset capping." EPA is using the term "thin inset capping" because the final cap surface would be at the existing grade. EPA's remedy would remove contaminated sediment to depth of 30" and backfill that excavation with clean sand, using activated carbon and oleophillic clay amended layers in the bottom of the backfill materials.

The trustees had questions but did not express any particular concern about the remedy proposed for the beaches.

Meeting Wrap Up

The trustees appreciated the update. Donna said this format (in person briefing) is helpful. Helen agreed to come back regularly as the process moves forward and provide key updates by email.

EPA will think through the concerns raised by the trustees and propose more concrete steps to address them. Some concerns may be addressed now / prior to the ROD, while others can't or won't be addressed until the remedial design process is underway. EPA agreed to get back to the trustees to describe the proposed approach to address the concerns prior to issuing the proposed plan.